



November 8, 2010

Water Docket
Environmental Protection Agency
Mail Code: 28221T
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

Re: Docket ID No. EPA-R03-OW-2010-0736
Comments on Draft Chesapeake Bay TMDL for Nutrients and Sediment

To Whom It May Concern:

Please accept this letter of formal public comment on the draft Chesapeake Bay Total Maximum Daily Load (TMDL) on behalf of Dominion Resources. While the draft TMDL has several proposed changes, Dominion's interest is primarily with the evaluation of the state watershed implementation plans (WIPs) performed by the United States Environmental Protection Agency (EPA) and the potential imposition of EPA federal backstops on significant and non-significant facilities owned by Dominion. Dominion owns and operates the Chesterfield Power Station, a significant discharger, and the following 15 non-significant facilities that could be affected by the Chesapeake Bay TMDL: North Anna Power Station, Surry/Gravel Neck Power Station, Yorktown Power Station, Hopewell Power Station, Chesapeake Energy Center, Possum Point Power Station, Bremo Power Station, Bear Garden Power Station, Gordonsville Power Station, Castlewood Road Facility, Mount Storm Power Station, North Branch Power Station, Dominion Gas Transmission Sabinsville Station, Dominion Gas Transmission Tioga Station, and the Cove Point LNG Terminal.

I. Proposed Limits for Significant Dischargers

Dominion has significant concerns regarding the potential imposition of both the EPA's moderate and full Federal backstops. As mentioned above, Dominion owns and operates the Chesterfield Power Station, a 1700-Megawatt fossil fuel power station in Chesterfield, Virginia. The EPA's moderate backstop, as set forth in Section 9, Table 9-4 of the Draft Chesapeake Bay TMDL, proposes the following wasteload allocations (WLAs) for the Chesterfield Power Station:

Facility	Annual Nitrogen WLA (lbs)	Annual Phosphorus WLA (lbs)	Annual Sediment WLA (lbs)
Dominion- Chesterfield Power Station	343,939	185	0.000000

EPA indicates that if the Virginia WIP is not strengthened by the Commonwealth, then the agency will include the moderate backstop limits in the final TMDL and possibly include the full backstop limits if warranted. The EPA's full backstop WLAs proposed for the Chesterfield Power Station, located in Table Q-2 of the draft Chesapeake Bay TMDL, are as follows:

Facility	Annual Nitrogen WLA (lbs)	Annual Phosphorus WLA (lbs)	Annual Sediment WLA (mill lbs)
Dominion- Chesterfield Power Station	166,036	43	0.000000

Per the recent meeting of the Virginia Water Commission held on October 26, 2010, we understand that the Commonwealth and the EPA are working towards a resolution that will avoid the federal backstops in the final TMDL, pending ongoing negotiations around the concept of "reasonable assurances." Given that negotiations are underway and that no final decision has been reached regarding the incorporation of backstop limits on point source discharges, we offer the follow perspective on the backstops.

A. Sediment Backstops

The moderate backstop numbers listed above propose a total annual sediment wasteload allocation (WLA) of 0.00 for the Chesterfield Power Station. It is our understanding that calculations performed by TetraTech on behalf of the EPA produced the zero sediment WLA because the input deck provided to TetraTech did not include flow data for the Chesterfield Power Station. As a result, the moderate and full backstops propose incorrect and not reasonable achievable sediment WLAs for the Chesterfield Power Station. Dominion is providing the following flow data to the Commonwealth and EPA to correct the input decks being used to develop the sediment TMDL:

Outfall 004, 2006-2009: Average Flow	10.04 MGD	Maximum Flow 12.06 MGD
Outfall 005, 2006-2009: Average Flow	2.74 MGD	Maximum Flow 4.59 MGD

As acknowledged by EPA in its evaluation of the Virginia WIP, the sediment reductions called for in the Virginia WIP exceed the sediment load reduction goal set by the EPA by as much as 12%. (EPA's Draft May TMDL Executive Summary at 7). Moreover, the EPA has noted that wastewater sources of sediment are an insignificant portion of the Chesapeake Bay sediment load. In Section 4.5.2 of the EPA's draft TMDL, EPA indicates that from the 75 significant and 1,446 non-significant industrial discharges, the estimated 2009 TSS wasteload to the Chesapeake Bay is 0.5% of the total load. Furthermore, in Section 4 of the draft TMDL the EPA determines, "[m]odeled sediment loads for those [industrial] facilities are not present because wastewater discharging facilities represent a *de minimis* source of sediment." (EPA

Draft TMDL at 4-17). The small amount of sediment from industrial wastewater is controlled in VPDES permits by existing technology-based limits in the form of monthly average Total Suspended Solids (TSS) concentrations. Additionally, we wish to note that TSS and sediment resulting from stream bank erosion and soil erosion are not the same. Much of the sediment of concern with regards to the Chesapeake Bay is inorganic in nature and is associated with erosion from upland land surfaces and erosion of stream corridors. By contrast, the sediment found in most industrial processes is organic. Existing cost-effective filtration technologies are not likely to achieve EPA's backstop allocations, because the organic nature and small size of the industrial TSS makes it difficult to settle. While we support the collective effort to restore water clarity and submerged aquatic vegetation through the control of sediment, we believe that the sediment backstops for point sources are not prudent given existing controls and the *de minimis* impact of such discharges.

B. Nutrient Backstops

Under the Water Quality Management Planning Regulation (9 VAC 25-720) and the resultant Watershed General Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia (9 VAC 25-820), the Chesterfield Power Station holds a nitrogen WLA of 352,036 pounds and a phosphorus WLA of 210 pounds. We are currently able to comply with the nitrogen and phosphorus WLAs. At this time, however, compliance with the Chesterfield Power Station's phosphorus WLA can be accomplished only through the purchase of available nutrient credits.

Over the past several years Dominion has made a considerable investment in state-of-the-art air quality control equipment, and we expect to install additional emissions control technologies to achieve various emissions reductions in the future. An unintentional outcome of the operation of this air emissions control equipment is the addition of nutrient loadings. For example, Dominion is in the process of adding a second Flue Gas Desulfurization (FGD) unit at Chesterfield. As the two FGD units become fully operational, they are expected to impact the nitrogen and phosphorus discharges at the station. However, these emissions controls remove substantially more nutrients from the air than will be returned to the water.

The Chesterfield Power Station also reclaims and reuses wastewater from the Proctors Creek Wastewater Treatment Plant. This beneficial reuse of water at the Chesterfield Power Station reduces water intensity at the facility and helps conserve the water resources of the Commonwealth. At the time WLAs were assigned to the Chesterfield Power Station under the Water Quality Management Planning Regulation, the reuse of the Proctors Creek WWTP effluent was not under consideration. Without careful consideration of benefits of this reuse of water it could become even more difficult for Dominion to comply with its existing nutrient WLAs.

The Chesterfield Power Station also has a large volume of non-contact cooling water. We ask that the Commonwealth continue to exclude non-contact cooling water discharges from applicable WLAs. We also ask that DEQ give consideration to excluding other similar

discharges that contain "background" nutrient loadings such that WLAs are based upon net loadings.

Dominion urges the EPA to maintain the current WLAs for the Chesterfield Power Station. The nutrient reductions contemplated in the moderate and full backstops become achievable only if sufficient nutrient credits are available for exchange. We support provisions that allow nutrient trading and offsets to achieve water quality goals. However, we are concerned that the federal backstops may result in a nutrient credit market where demand exceeds supply.

C. Reasonable Assurances

We understand that the EPA has some outstanding questions regarding the provision of "reasonable assurances" in the state WIPs. We appreciate the complicated nature of determining what may constitute reasonable assurances. It is our belief that the success of the Chesapeake Bay restoration will depend on having policies in place that maintain the assigned cap loadings over time. Therefore, we urge the EPA to forego inequitable actions that may result in short-term, yet unsustainable progress. Instead we encourage the development of a long-term, equitable solution that allows the Chesapeake Bay jurisdictions not only to meet the cap allocations, but to maintain those allocations over time.

II. Proposed Limits for Non-significant Dischargers

The EPA proposes the following WLAs for non-significant Dominion facilities in the Chesapeake Bay Watershed (Table Q-2 of the Draft TMDL):

Facility	Annual Nitrogen WLA (lbs)	Annual Phosphorus WLA (lbs)	Annual Sediment WLA (mill lbs)
Dominion - North Anna Power Station	12	13	0.000001
Dominion - Gordonsville Power Station	0	47	0.000197
Dominion - Gravel Neck CT Stat	44	17	0.000195
Dominion - Hopewell Power Station	5	0	0.00029
Dominion - Bremo Power Station	192	57	0.019495
Dominion Bear Garden Generating Station	192	57	0.014901
Dominion - Chesapeake Energy Center	44	17	0.0144
Dominion - Possum Point Power	13	1	0.006932
Dominion - Yorktown Power Station	44	17	0.000069

Dominion - Materials & Meter - Castlewood	44	17	0.018963
Virginia Electric & Power – Mt. Storm Power Station	0	0	0
VEPCO – Mt. Storm Flyash Disposal	0	0	0.000007
VEPCO – North Branch Power Station	0	0	0.00038
Dominion Transmission – Sabinsville	0	0	0
Dominion Transmission - Tioga	2	1	0.000009
Cove Point LNG Terminal	90	6	0.002474

Upon inquiry to the EPA, however, it was determined on November 1, 2010 that the backstop numbers listed in Table Q-2 for non-significant Dominion facilities were incorrect. The EPA has provided the following corrected WLAs:

Facility	Annual Nitrogen WLA (lbs)	Annual Phosphorus WLA (lbs)	Annual Sediment WLA (mill lbs)
Dominion - North Anna Power Station	3153.523099	84.09394931	0.0000228
Dominion - Gordonsville Power Station	0.614773948	84.09394931	0.0003457
Dominion - Gravel Neck CT Stat	630.70446199	16.81877986	0.0002576
Dominion - Hopewell Power Station	64.93438454	0.147902138	0.0003823
Dominion - Bremo Power Station	3153.523099	5784.09394931	0.0327517
Dominion Bear Garden Generating Station	3153.523099	84.0394931	0.0250337
Dominion - Chesapeake Energy Center	630.70446199	16.81877986	0.0190100
Dominion - Possum Point Power	192.6737192	1.464765754	0.0100095
Dominion - Yorktown Power Station	630.70446199	16.81877986	0.00008444
Dominion - Materials & Meter - Castlewood	630.70446199	16.81877986	0.0250337
Virginia Electric & Power – Mt. Storm Power Station	0	0	0
VEPCO – Mt. Storm Flyash Disposal	0.310988768	0.010385902	0.0024098

VEPCO – North Branch Power Station	2.685577931	0.089519264	0.0040284
Dominion Transmission – Sabinsville	0	0	0
Dominion Transmission - Tioga	5.387682828	0.179589428	0.0000449
Cove Point LNG Terminal	90	6	0.002474

We appreciate EPA's willingness to reexamine the backstop numbers for our facilities and their gracious provision of corrected numbers. However, we are concerned that both the original and the corrected backstop numbers do not comport with actual loadings at these facilities. If the backstops move forward, we encourage the EPA to develop WLAs that represent the effluent characteristics and recognize the nature of operations at each facility. New WLAs that are incongruous with actual discharges, loadings, and treatment capabilities may ultimately result in WLAs that fail to ensure the maintenance of water quality standards.

For example, the corrected full backstop numbers listed above propose nitrogen, phosphorus, and sediment WLAs of 0.00 for the Mt. Storm Power Station. As discussed with the Chesterfield Power Station sediment WLA, the input decks used to calculate these WLAs relied on incorrect flow data. Prior to November 2009, the Mt. Storm Power Station did not have instrumentation to measure flow at Outfall 001. Since the installation of flow measurement instrumentation, flows from Outfall 001 have ranged from a monthly average of 0.55 MGD to as much as a monthly average of 152 MGD. At this time, Dominion has only the one year of measured flow data for outfall 001 at Mt. Storm and is concerned that the figures shown above may not reflect future operations and flows. If the federal backstops move forward, we hope that there will be an opportunity to gather more accurate flow data before establishing WLAs for nutrient and sediment loadings at the Mt. Storm facility.

We also note that the WLAs proposed in the backstops do not distinguish between stormwater outfalls, non-process, process, and sewer outfalls at or between the facilities listed above. In general, the Dominion facilities listed above have several outfalls. Additionally, the Castlewood Facility is a biology, recycling, and materials handling facility with one discharge, a stormwater outfall. However, in the backstop, a WLA has been developed for the Castlewood Facility that is identical to WLAs developed for the Yorktown Power Station, the Chesapeake Energy Center, and the Dominion Gravel Neck and Surry Power Station. The capability to treat nutrients and sediment sufficiently varies greatly between stormwater and industrial sources. Accordingly, without further clarification, it seems that setting identical numerical limits for stormwater and industrial outfalls will not produce the "reasonable assurances" that the EPA desires.

Similarly, the EPA proposes nitrogen, phosphorus, and sediment WLAs of zero for the Dominion Gas Transmission Sabinsville Station. The Sabinsville Station discharge results from a stormwater pond outfall. Flows at this facility are not measured due to the fact that flows generally occur only during periods of rain. Freshwater springs at the facility also create some flow from the stormwater pond, however, during periods of no rainfall no flows may occur.

The Dominion Gas Transmission Tioga facility represents yet another distinct category of discharge. The discharge at this facility is the result of a sewage package plant. The flows from this discharge are not measured due to the intermittency of the discharge. At this time, the facility is manned by 2 people over a 24-hr period. It is estimated that the flows from this facility are somewhat less than the sewage discharge resulting from a typical household of 3 or 4 people.

We understand that the EPA is looking at all types of industrial outfalls to find reductions in the absence of "reasonable assurances" that reductions will be achieved from all contributing sources. However, we request that the EPA take into account the unique differences in stormwater, process water, non-process water, and sewer water when evaluating the appropriateness of controls on affected facilities. In order to aid the EPA, we are providing a chart in Appendix A that illustrates the various outfall types at potentially affected Dominion facilities.

Dominion is also concerned that stale data and data aggregated from sources other than the permittee have been employed to develop the non-significant backstops. EPA recognizes that most non-significant facilities do not have monitoring data for nutrients and sediment, since such facilities have not been required to monitor for these effluent constituents. Thus, when developing the draft TMDL backstops for non-significant facilities, the EPA relied upon estimates from TetraTech based on the Typical Pollutant Concentrations for non-significant industrial plants.

The aggregation of data from across an industry or industry sector may produce illogical results when applied to an individual facility, especially where individual facilities within an industry can have very different effluent characteristics. In such a case, the employment of typical pollutant concentrations for an industry may produce permit limits that fail to recognize facility capabilities and protect water quality.

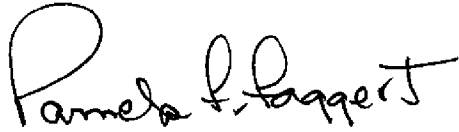
Dominion is concerned that the EPA industry concentration estimates do not represent the characteristics of the effluents at our facilities in a manner that is accurate or appropriate to ensure the protection of water quality. We have examined the non-significant facilities listed above, but we have been unable to make any determinations on the appropriateness of the limits proposed by the EPA due to the lack of sufficient, representative monitoring data for nitrogen, phosphorus, sediment, and flow at our facilities. We, therefore, support requests made from the Bay jurisdictions to monitor for nitrogen, phosphorus, sediment, and flow at non-significant facilities.

Conclusion

We appreciate the opportunity to comment on the EPA draft TMDL as applicable. We understand that at this stage in the restoration of the Chesapeake Bay, challenging decisions abound. We urge the EPA to maintain equity within its next iteration of the draft TMDL, and we request that the EPA work with the Chesapeake Bay jurisdictions to avoid the disparate impacts of the proposed backstops.

Should you have any questions regarding these comments, please contact Joe Tannery at (804) 273-3012 or joseph.j.tannery@dom.com.

Sincerely,

A handwritten signature in black ink that reads "Pamela F. Faggert". The signature is written in a cursive style with a large initial "P" and a stylized "F".

Pamela F. Faggert

APPENDIX A: Dominion Facilities & Outfall Descriptions

VPDES Permit Number	Facility	External Outfall	Outfall Description
VA0004081	Chesapeake	001	Process wastewater
		002	Process wastewater
		003	Process wastewater
		004, 005	Process wastewater
		007, 008, 009	Process wastewater
		019,020	Process wastewater
		010	Stormwater runoff
		011-012	Stormwater runoff
		013, 015, 018, 021	Stormwater runoff
		016-017	Stormwater runoff
		030	Stormwater runoff
		031	Process wastewater
VA0004146	Chesterfield	001	Process wastewater
		002	Process wastewater
		003	Process wastewater
		004	Process wastewater
		005	Process wastewater
		006-011	Process wastewater
VA0002071	Possum Point	001-002	Process wastewater
		003	Process wastewater
		004	Process wastewater
		005	Process wastewater
		007-008	Process wastewater
VA0082783	Hopewell	001	Process wastewater
		002	Stormwater
VA0004090	Surry	001	Process wastewater
		002	Stormwater
VA0052451	North Anna	001	Process wastewater
		009	Process wastewater
		013	Process wastewater
		016	Process wastewater
		020	Process wastewater
		021	Process wastewater
		014, 022, 023, 024, 025, 026	Stormwater
VA00987033	Gordonsville	001	Process wastewater
		901	Stormwater
VA0004138	Bremo	001	Process wastewater
		002	Process wastewater
		004	Process wastewater
VA0090891	Bear Garden	001	Process wastewater

		002	Stormwater
VA0004103	Yorktown	001	Process wastewater
		002	Process wastewater
		003-004	Process wastewater
		005-006	Non-process wastewater
		007	Non-process wastewater
		008	Process wastewater
		009, 013, 015	Stormwater
		010	Stormwater
		011	Stormwater
		012	Stormwater
		014	Process wastewater
		016 - 017	Non-process wastewater
VA0087734	Castlewood	001	Stormwater
WV0005525	Mt. Storm	001	Process wastewater
WV0077461	Mt. Storm		Process wastewater
WV0115231	North Branch		Process wastewater
PAS314801	Sabinsville		Stormwater
PA0114073	Tioga		Sewage Wastewater
MD0063975	Cove Pt		Process Wastewater